

The logo for ORBCOMM, featuring the company name in a bold, white, sans-serif font on a dark red rectangular background. The 'O' in ORBCOMM has a small white circle with a dot inside, resembling a globe or a network node.

ORBCOMM®

CONNECTING THE
WORLD'S ASSETS

The text 'E-BOOK' in a white, sans-serif font, positioned in the upper right corner of the page. The background of the entire page is a composite image: the top left shows a driver's perspective from the steering wheel of a truck; the rest of the image shows a multi-lane highway with several semi-trucks driving away under a blue, overcast sky. A network diagram with nodes and connecting lines is overlaid on the top right and bottom left corners.

E-BOOK

Deploying Fleet Safety: Saving Costs, Saving Lives.

In addition to lost lives, motor vehicle crashes cost employers more than \$60 billion a year in medical care, legal expenses, property damages and lost productivity¹.

Implementing a comprehensive fleet safety program can help reduce crashes, protect lives, improve driver retention and achieve significant operational improvements and cost savings.

Vehicle collisions are the leading cause of workplace fatalities in the United States. More than 2,000 occupational motor vehicle deaths occur every year, accounting for 30 percent of the total number of fatalities from occupational injuries².

Fleet Safety: Key Elements for Successfully Deploying a Road Safety Program

94 percent of vehicle collisions involve driver error and are largely preventable, says the National Highway Traffic Safety Administration (NHTSA). Some of the leading causes include distracted driving, driving under the influence, driver fatigue and speeding. When it comes to large trucks and buses, the statistics tell a similar story, with driver behavior accounting for almost 90 percent of accidents. And with smartphones and connected car technology becoming more prolific in recent years, the trend is

expected to continue—traffic deaths in the U.S. rose 5.6 percent in 2016, while fatalities involving large trucks increased by 5.4 percent for a decade high, says the NHTSA.

Costly errors

A recent report by the Network of Employers for Traffic Safety (NETS) estimates crashes cost employers \$47.4 billion annually. Collisions involving large trucks and buses carry a higher price tag,

costing the industry \$118 billion in 2016, says the Federal Motor Carrier Safety Administration (FMCSA).

Whether you manage a fleet of light or heavy-duty vehicles or oversee a mobile workforce, implementing a comprehensive fleet safety program will help you reduce vehicle crashes, protect lives, improve driver satisfaction and retention and achieve significant operational improvements and cost savings.

¹Occupational Safety and Health Administration (OSHA)

²National Safety Council (NSC)

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Implementing a driver safety program pays off

Buy-in throughout the organization

Different people in the organization will have different expectations of desirable outcomes for the program. Senior management will want to see the numbers trend in the right direction, health and safety officers will be concerned with identifying violations, and compliance managers will want to ensure drivers operate within working-hours regulations. For a program to be implemented across the entire organization and achieve long-term success, it must address the needs of different departments in the organization and have consensus from all members of senior management.

Outlining and communicating processes and goals

The details of a fleet safety program must be clearly outlined and should include program goals, processes, expectations and the standards by which

drivers will be measured and rewarded. Beyond outlining the policy, regular driver training, coaching and mentoring will reinforce best practices and ensure safety and the program's objectives stay top of mind.

Changing the culture

Many companies wait for disaster to strike before they think about safety. For high-performing companies, safety is a core value that's reinforced and prioritized at all levels of an organization—it's a forethought not an afterthought. Organizations that successfully achieve and maintain good safety records hold drivers accountable for their actions and adequately incentivize and reward performance.



Here are some elements to consider when implementing a driver safety program:

- Expectations and objectives must be agreed on by all stakeholders
- The program must be clearly outlined and communicated to drivers and employees throughout the organization
- Safety must become part of the corporate culture
- The right technology needs to be incorporated into vehicles to accurately assess driver performance, provide feedback to drivers in real-time and evaluate the overall effectiveness of the program

A fleet safety solution monitors the vehicle and notifies drivers in real time of any behaviors that may compromise their safety such as speeding, harsh braking and harsh accelerating. Persistent dangerous driving events are reported to a back-office application as alarms and reports, so that managers can assess individual performance and work with drivers on specific areas that may require improvement. Allowing drivers to become aware of their actions as they occur and self correct is proven to be a more effective mentoring method and one that requires less involvement from management.

Incorporating the right technology

Incorporating the right technology into vehicles is key to accurately assessing and improving driver performance.

Vehicle Monitoring Technology Works

A study by the U.S. Department of Transportation showed a 50 percent reduction in unsafe driving events—speeding, sudden acceleration and hard braking—among drivers who were monitored and coached by in-vehicle monitoring systems. According to the same study, telematics solutions used in conjunction with new vehicle safety technologies such as lane departure warning, collision warning and active braking systems can help fleets reduce vehicle crashes by 20 to 30 percent.

Who can benefit from a fleet safety program?

Any organization operating motor vehicles, regardless of fleet size and type, can significantly improve road safety by implementing a comprehensive fleet safety program. There are, however, specific industry sectors where occupational highway transportation deaths are more prevalent. In the U.S., for instance, the trucking industry accounts for the highest rate of work-related transportation fatalities, followed by logging, wholesale distribution of petroleum products, waste management and support activities for

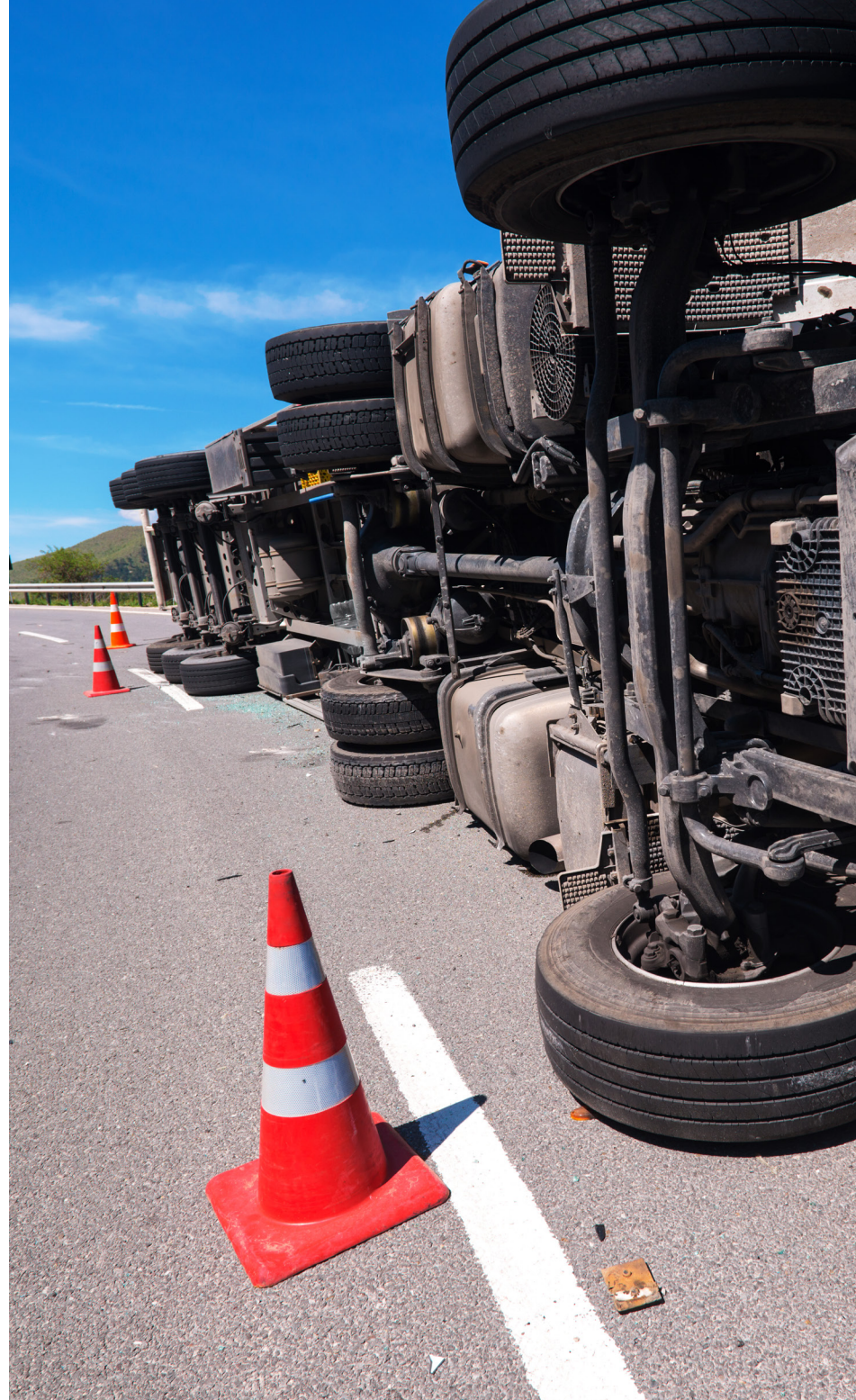
the mining industry, says the Center for Disease Control and Prevention (CDC).

According to the Occupational Safety and Health Organization (OSHA), 823 oil and gas extraction workers were killed on the job between 2003 and 2010—a fatality rate seven times greater than the rate for all U.S. industries. Motor vehicle crashes remain the leading cause of death in the oil and gas industry with roughly 4 of every 10 workers killed in a highway vehicle accident, says OSHA.



MOTOR VEHICLE CRASHES

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Using Technology to Improve Safety, How Can ORBCOMM Help?

With over 25 years of experience in fleet telematics, ORBCOMM understands the needs of drivers and fleets. Our fleet safety solutions incorporate proven in-cab coaching technology that tells drivers when their actions aren't safe, helping them develop situational awareness and practice defensive driving. Powerful web and mobile applications deliver complete visibility of operations in the form of customized reports and alerts to different people in the organization based on job function and specific data requirements. An ELD-certified in-cab device extends functionality to drivers, enabling simplified management of working hours and on-the-road access to productivity tools.

ORBCOMM's technology has helped customers achieve a 90 percent reduction in accidents, an 89 percent reduction in aggressive driving, 86 percent reduction in speeding and 88 percent reduction in seatbelt violations.

Key features

In-cab verbal coaching:

ORBCOMM's fleet safety solution is designed to optimize driver performance. The system detects behaviors that may compromise safety such as speeding, harsh braking and over revving, and verbally alerts drivers as the behavior occurs to

get them to self-correct before things escalate.

Speed-by-Street™:

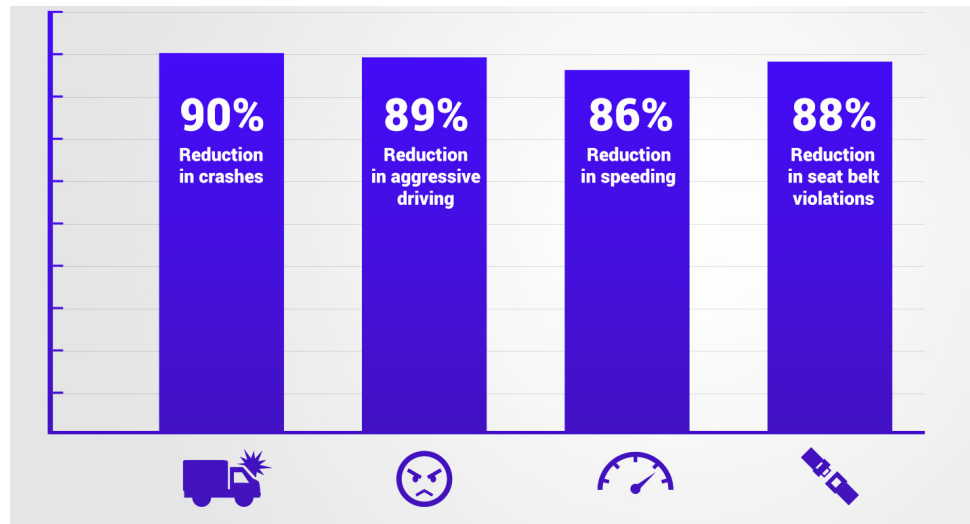
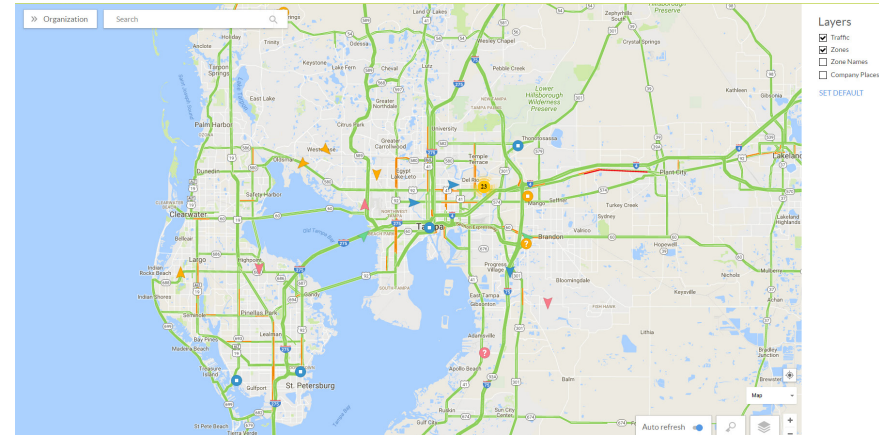
Our unique Speed-by-Street functionality alerts drivers when they exceed the speed limit on any given road with acute accuracy.

And because speed-limit data is stored on the device itself, drivers always have access to current information, even if no cellular connectivity is available.

Flexible platform: Web and mobile applications can be customized to deliver specific information to different people in the organization based on job function. The data can be seamlessly integrated into existing third-party applications to simplify deployment and everyday use.

Fleet safety simplified

ORBCOMM's fleet safety technology is squarely focused on the driver, and offers the only real-time solution that detects unsafe driver behaviour and offers verbal coaching before a crash or fineable offense occurs.



Actual fleet safety improvements after 90 days



What Can You Expect to Gain?

Safer, happier drivers

By integrating telematics technology and allowing drivers to proactively adjust their behavior through situational awareness, you are helping them become the best drivers they can be. With the right information at the right time, drivers can continuously improve their performance and maintain good scores, while fleets can adequately mentor, incentivize and reward good drivers, which consequently leads to improved morale and the ability to attract and retain more and better drivers.

Lowered collision-related costs:

The costs associated with vehicle collisions can be staggering. With billions of dollars spent every year in motor vehicle crashes, improving road safety and reducing accidents should be a top priority for any fleet. Vehicle monitoring solutions are proven to help minimize unsafe driving behaviors and reduce the number of collisions.


Fuel savings: Proper vehicle operation goes a long way when it comes to fuel economy. By significantly reducing extreme braking, accelerating and idling, fleets can expect to reduce fuel costs by up to 20 percent.

Extended vehicle life and reduced maintenance costs:

In addition to unnecessarily burning fuel, aggressive driving takes a toll on a vehicle's lifespan and its overall health. For fleet operators this means costly and more frequent repairs as well as lost revenue and productivity due to downtime. In addition to helping fleets minimize vehicle wear and tear, a telematics system can combine odometer readings, vehicle inspection and engine data to enable preventative maintenance. By analyzing current and past data, the system identifies when components might fail, allowing fleets to better plan service appointments and proactively replace parts before unexpected breakdowns interrupt operations.

Reduced liability: A telematics system can detect a crash or an unexpected stop and automatically notify the appropriate people in the organization to ensure quick action is taken. In the event of unexpected stops, this can help deter theft and protect drivers. In the event of crashes, data collected from the vehicle before, during and after the accident can help fleets protect against false claims.





ORBCOMM's fleet safety solutions are widely used by transportation and logistics, oil and gas, mining and utility companies to significantly improve driver safety, reduce fuel and vehicle maintenance costs, facilitate driver communications and improve productivity on the road. Our solutions support comprehensive Hours of Service management in compliance with the FMCSA's ELD mandate, and advanced productivity tools such as electronic Driver Vehicle Inspection Reports (DVIR) checklists, e-forms, work-alone timers, messaging, vehicle inspection alerts and more.

**To learn more about our truck, in-cab and fleet safety solutions
or to get a demo, email us at sales@orbcomm.com**

ORBCOMM (Nasdaq: ORBC) is a global leader and innovator in the industrial Internet of Things, providing solutions that connect businesses to their assets to deliver increased visibility and operational efficiency. The company offers a broad set of asset monitoring and control solutions, including seamless satellite and cellular connectivity, unique hardware and powerful applications, all backed by end-to-end customer support, from installation to deployment to customer care. ORBCOMM has a diverse customer base including premier OEMs, solutions customers and channel partners spanning transportation, supply chain, warehousing and inventory, heavy equipment, maritime, natural resources, and government. For more information, visit www.orbcomm.com.



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